

# PEOSH NEWS 2001

## NEW JERSEY PUBLIC EMPLOYEE PLAN RECEIVES APPROVAL

New Jersey has become the newest state to receive approval from OSHA to administer its own occupational safety and health plan for public employees.

New Jersey joins Connecticut and New York as one of three states authorized by OSHA to offer a safety and health program specifically for public employees. The New Jersey Plan is the first new state plan since New York was added in 1984. Twenty-three other states have OSHA-approved plans for the private sector that extend coverage to state and local government employees.

"We applaud the state of New Jersey for their ongoing commitment to the safety and health of their public employees," said OSHA Administrator Charles N. Jeffress. "It's a pleasure to recognize their accomplishment and welcome them as our newest state partner."

The Plan will be administered by the New Jersey Department of Labor with the Department of Health and Senior Services having responsibility for conducting health inspections. The program covers more than 470,000 public employees, including approximately 112,900 state government workers and roughly 357,100 municipal employees.

Private sector employees remain under the jurisdiction of federal OSHA. New Jersey has adopted standards identical to most federal OSHA safety and health standards and has committed to bring all of its standards into line with OSHA requirements. The State Plan also

provides that future OSHA standards and revisions will be adopted by the state.

The Occupational Safety and Health Act of 1970 and 29 CFR Part 1956 allow states and territories to establish plans that cover only state and local government employees - workers who are excluded from Federal coverage. Once a State Plan is approved, OSHA funds up to 50% of the program's operating costs.

To be eligible for a developmental public employee only State Plan, a state must operate an occupational safety and health program that is, or will be, "at least as effective" as the federal program. It also must have a sufficient number of safety inspectors and industrial hygienists to run the program effectively. New Jersey will have a staff of 20 safety and 7 health inspectors as well as staff to promote voluntary compliance. Finally, the state must provide data to federal OSHA on its activities.

Notice of plan approval was published in the January 11, 2001 issue of the Federal Register.

This news release text is on the Internet World Wide Web at <http://www.osha.gov>. Information on this release will be made available to sensory impaired individuals upon request.  
Voice phone: (202) 693-1999.

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Commissioner

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## Poor Indoor Air Quality Worries Public Employees

By Raja Iglewicz, CIH

The New Jersey Department of Health and Senior Services (NJDHSS), PEOSH Program has received about 200 indoor air quality complaints per year between July, 1990 through the end of June, 1999. In this time period about 41 percent of all the complaints and referrals that the Program has received were related to poor indoor air quality in public work places. New Jersey is the only state to have adopted an indoor air quality standard; there is no federal indoor air quality standard at this point in time.

The PEOSH Indoor Air Quality (IAQ) Standard, N.J.A.C. 12:100-13, became effective on March 3, 1997. A key goal in developing this standard was to reduce health symptoms associated with poor indoor air quality by employer compliance with the standard's provisions. Some health symptoms associated with poor IAQ include headaches, eye, nose and throat irritation, dry or itchy skin, fatigue, dizziness and nausea. Key points of the IAQ Standard are the designation of a responsible person in charge of an indoor air quality program, an ongoing preventive maintenance program, and checking the heating, ventilation and air conditioning system (HVAC) if carbon dioxide levels are

### IAQ Related Health Symptoms

- Headaches
- Eye, nose and throat irritation
- Dry or itchy skin
- Fatigue
- Dizziness
- Nausea
- Loss of concentration
- Relief may occur upon leaving the building

over 1000 parts per million parts of air (ppm). Other sections of the standard address designated smoking areas where applicable, microbial contamination, renovations and construction, and record keeping.

***If you have indoor air quality complaints at your workplace, how should you address this problem?*** First, employees should report the problem to their supervisor in order to resolve these issues. Developing an occupational safety and health program is an essential component of addressing IAQ problems. Reporting and addressing IAQ complaints through in-house health and safety committees is probably the most effective method of resolving indoor air quality problems. Unfortunately, these avenues sometimes break down.

***What recourse do public employees have?*** Call the PEOSH



*Poor IAQ can result in microbial growth—a potential health hazard*

(Continued on page 3)

## Atlantic County's Successful Indoor Air Quality Program

By Randi Tussone  
Atlantic County RISC

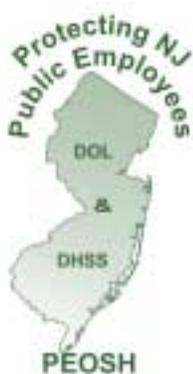
At the direction of the County Executive and with the support of the County Freeholders, Atlantic County has implemented an indoor air quality (IAQ) response program. Atlantic County Office of Risk, Insurance, Safety & Claims (RISC) helped to develop an IAQ Program and is using the complaint form and questionnaire that is found in the PEOSH Model IAQ Program to identify where the problem may occur. When an IAQ complaint is received in the Office of RISC, a complaint form and questionnaire are sent to the complainant. After the completed form and questionnaires are returned to the Office of RISC, an investigation is scheduled with the complaining party(s) and Facilities

Management staff. The inspector measures carbon dioxide levels, carbon monoxide levels if appropriate, temperature and relative humidity, and conducts a visual inspection for water intrusion. Based on the questionnaire results, other airborne chemicals may be measured such as volatile organics. Many of the complaints can be easily resolved, but some investigations may turn out to be more complex.

In each case the Office of RISC and Facilities Management work together towards finding the best resolution possible. The Office of RISC conducts reinvestigations every 30 days until the complaint has been resolved. By conducting these reinvestigations, employees see that County Administration is committed to resolving problems in a timely manner.

Atlantic County has worked with the PEOSH

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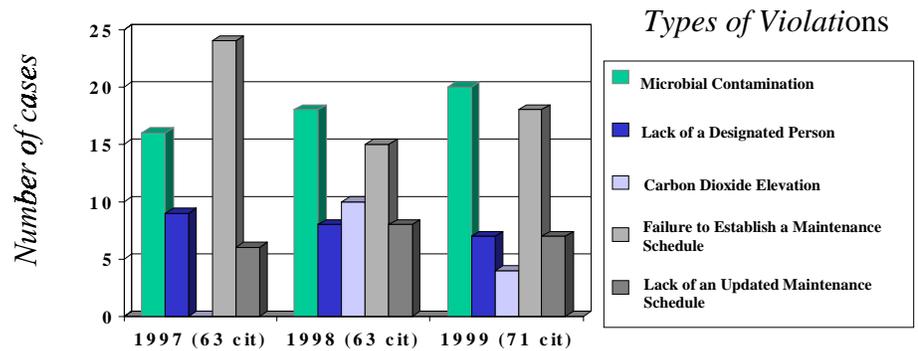




Water damaged ceiling

## Indoor Air Quality Citations

1997 - 1999



### IAQ Worries Public Employees (Continued from page 2)

Program for a consultation to discuss your concerns and, if necessary, ask for a complaint form, which should be filled out and signed by either the employee or employee representative. The Program staff conduct inspections in response to signed complaints. On-site inspections are followed up with written reports with recommendations and potential citations.

It is interesting to observe the breakdown of the IAQ citations for the years 1997 through 1999. Look at the bar graph located above. Citations were most often issued for the following reasons: microbial contamination, lack of a designated person, elevated carbon dioxide levels, failure to establish a maintenance program or update the maintenance schedule.

The PEOSH Program offers many education programs, but one of the most popular or the one in most demand is on indoor air quality. You can arrange for an IAQ educational program at your worksite free of charge by calling (609) 984-1863. The Program has developed some excellent materials on this topic which include an IAQ Model Program, information bulletins on the IAQ Standard, indoor air quality in general and bioaerosols or microbial contamination. Visit our website at [www.state.nj.us/health/eoh/peoshweb](http://www.state.nj.us/health/eoh/peoshweb) and you can download this information.

## Indoor Firing Range Contaminates a Borough Hall with Lead Dust

By Eric Beckhusen and Virginia Brenton

The New Jersey Department of Health and Senior Services PEOSH Program Indoor Firing Range Standard (N.J.A.C. 12:100-8) has requirements to protect employees using and maintaining indoor firing ranges. This Standard applies to indoor firing ranges operated by public employers. The purpose of this Standard is to reduce the potential for exposure to lead and high noise levels to shooters, range officers and maintenance personnel.

The Standard has requirements for:

- ◆ ammunition
- ◆ ventilation
- ◆ noise control, and
- ◆ work practices.

The New Jersey Department of Health and Senior Services (NJDHSS) Public Employees Occupational Safety and Health (PEOSH) Program conducted a firing-range-targeting inspection project from July 1990 through June 1991 at 25 indoor firing ranges. This project was conducted to ensure compliance with the PEOSH Standards for Indoor Firing Ranges for Public Employees (N.J.A.C. 12:100 – 8). From 1979 through 1985, the PEOSH Program identified and inspected 51 police indoor firing ranges. These

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### Indoor Firing Range Requirements

#### Ammunition

- Copper or nylon jacketed bullets
- Zinc bullets

#### Ventilation

- Dedicated ventilation system for the range

#### Noise Control

- Appropriate ear protection and yearly audiometric examinations

#### Work Practices

- Ventilation system maintenance
- Dust suppression
- HEPA vacuum

*Atlantic County's Successful IAQ Program (Continued from page 2)*

Program education staff in presenting an educational program where supervisors and employees are taught what IAQ is, the Indoor Air Quality Standard, what to do if there is a complaint and how to recognize if a complaint is immediately dangerous to life and health. The County encourages employees to call with questions and concerns.

Since this policy has been instituted, there has been positive feedback from employees and a reduction in indoor air quality problems. If you would like to consult Randi Tussone about Atlantic County's IAQ Program, she can be reached at (609) 343-2231.

*Indoor Firing Range Contaminates a Borough Hall with Lead Dust (Continued from page 3)*

ranges were evaluated against criteria developed by the National Institute for Occupational Safety and Health (NIOSH). The results of all these inspections indicated serious deficiencies in work practices and engineering controls in all but a very small number of firing ranges. Also, over the years the PEOSH Program had received reports of elevated blood lead levels ranging from 27 micrograms of lead per 100 millimeters of whole blood (ug/100 ml) to 48 ug/100 ml in police firearms instructors. Ninety two percent or 23 of the 25 inspected indoor firing ranges were cited for violations of PEOSH Standards even though 22 of the 23 had been previously inspected and had received reports describing deficiencies and remedies.

### Health Effects

Working in indoor firing ranges can pose serious health hazards such as lead poisoning and hearing loss from exposure to high noise levels. When guns are fired, lead dust and fumes may be emitted. Sources of lead include the bullet primer, vaporization of the projectile and fragmentation of the projectile when it strikes the bullet trap. Lead poisoning may occur through the inhalation and/or ingestion of lead fumes or dust. Most people with elevated blood lead levels do not have symptoms of lead poisoning. Nevertheless, elevated levels can have serious adverse effects on the body. The precise level at which health effects begin is uncertain. Health effects may be seen above 10 ug/100 ml in children and above 25 ug/100 ml in adults. Levels of 40-60 ug/100 ml may cause muscle weakness, anemia, difficulties with mental concentration and

memory. Prolonged exposure to high noise levels can lead to hearing loss.

### Borough Hall Contamination

The PEOSH Program received an employee complaint about being exposed to potentially dangerous levels of lead from contamination in the indoor firing range located in the basement of a borough hall. An investigation of this site revealed poor maintenance and improper installation of the filter that was designed to trap lead dust in the firing range ventilation system. Actually, lead dust was leaking out of the seams of the ductwork. Unfortunately, this ductwork ran through many of the basement rooms. Lead dust that had leaked out was carried to other parts of the building by foot traffic, by air currents that ran through openings between floors, and by other ventilation system air returns that had become contaminated. Eventually, lead dust was spread throughout the entire two-story building. Once this problem was identified, the employer had to spend a significant amount of money to thoroughly clean the entire building including the ventilation ductwork. Further, at the employer's expense, all employees were offered blood lead tests to determine if anyone had lead poisoning. Fortunately, no one was diagnosed with lead poisoning.

For this municipality, the lesson of good routine maintenance of the ventilation system was learned the hard and costly way. Proper routine maintenance of building ventilation systems is an essential component of maintaining good building air quality. This maintenance becomes even more critical when the ventilation system is one that is designed to protect employees from a hazardous substance such as lead.

For now this municipality has no plan for re-opening the basement indoor firing range.

### Ammunition

Practice ammunition used in indoor firing ranges must be copper jacketed, nylon jacketed, or zinc bullets (no wad cutters). There is no restriction on the type of service ammunition used.

### Ventilation System

The firing range must have its own ventilation system. The air must be introduced behind the firing line and be evenly distributed. The range must be maintained at a negative pressure in reference to surrounding areas to prevent any lead contamination of other parts of the building. Air should be exhausted down range by the bullet trap. The Standard requires a minimum firing line velocity of 50 feet per minute



### *Indoor Firing Range Contaminates a Borough Hall with Lead Dust*

*(Continued from page 4)*

and a down range conveying air velocity of 35 feet per minute. To assure that the ventilation system is working properly, there must be periodic inspection and maintenance of the ventilation system.

### Noise

The Standard requires that proper ear protection be provided and worn by all individuals inside the indoor firing range and yearly audiometric examinations be provided to range officers and instructors.

### Work Practices

The ventilation system must be in operation whenever the range is in use or being cleaned. The range should be cleaned using wet methods or a high efficiency particulate air (HEPA) filter vacuum. When cleaning, repairing or reclaiming lead from the bullet trap, a respirator and coveralls must be worn. Eating, drinking or smoking in indoor firing ranges is prohibited.

Questions about this regulation or concerns about the indoor firing range used by your police department should be directed to the NJDHSS PEOSH Program at (609) 984-1863.



**For more information on personal protective equipment see the NJDHSS PEOSH Program Information Bulletin: "Personal Protective Equipment."**

**Copies of this document may be obtained from the PEOSH Program by calling (609) 984-1863.**

**This information bulletin may also be downloaded from the PEOSH Web Site:**

**[www.state.nj.us/health/eoh/peoshweb](http://www.state.nj.us/health/eoh/peoshweb)**

## Searching for Information on the Internet

**Lorraine Davison**

**Canadian Centre for Occupational Health and Safety**

Finding information on the Internet has become a difficult task. Internet search engines used to provide a manageable number of relevant web sites, but with the growth of the number of web sites, users have new problems in finding useful information efficiently.

This article will provide industrial hygienists with some suggestions for saving precious Internet search time and identify some helpful search tools.

### Topic Directories vs. Search Engines

If you are looking for a specific website or subject information that can be readily described, use a topic-based directory service such as Yahoo<sup>®</sup>, which has descriptions of about 1 million websites. Other popular web directories include LookSmart<sup>®</sup>, Open Directory<sup>®</sup>, Britannica<sup>®</sup> and Snap<sup>®</sup> (see chart below for web addresses). They usually direct users to related topic categories as well as relevant websites, usually with some brief description of the site. Remember these rules: Looking for a website? Use an Internet directory. Looking for web content? Use a search engine.

### Types of Search Engines

| <i>Top Five Health and Safety Directories</i> |  |
|---|--|
| CCOHS H&S Internet Directory...               | <a href="http://www.ccohs.ca/resources">www.ccohs.ca/resources</a>                           |
| SIRI Website Safety Directory...              | <a href="http://hazard.com/links.html">hazard.com/links.html</a>                             |
| OSHWeb Directory...                           | <a href="http://oshweb.me.tut.fi/cgi-bin/oshweb.pl">oshweb.me.tut.fi/cgi-bin/oshweb.pl</a>   |
| Industrial Hygiene on the Web...              | <a href="http://www.industrialhygiene.com/links">www.industrialhygiene.com/links</a><br>AIHA |
| Industrial Hygiene Links ...                  | <a href="http://www.aiha.org/safeweb.html">www.aiha.org/safeweb.html</a>                     |

What does a search engine do? Basically, it is a program that crawls around the Internet and locates web page content, then indexes the words from that page into a database along with that web address (URL). There are now hundreds of different Internet search engines available. These engines are becoming increasingly more customized in scope and features. For example, you can select from search engines that are specialized by:

- Subject: hundreds of sites focus on very specific web content such as music, math, money, etc.
- Language: indexing non-English content only, such as Spanish or French
- Geographic areas: indexing only the United States, only Europe, etc.

*Searching for Information on the Internet (Continued from page 5)*

- Geographic areas and subjects: indexing only U.S. government websites or Canadian OSH sites
- User group types
- Excludes advertising.

Currently the most important sites for industrial hygienists are general search engines that index terms from a massive number of web pages into their databases. Users search for specific words or phrases, finding links to useful web pages.

## Review of General Search Engines

Many reports comparing various search engines are available on the web that focus on overall web coverage, searching features and sorting of results. See sites like Search Engine Showdown<sup>®</sup> ([www.searchengineshowdown.com](http://www.searchengineshowdown.com)) or Search IQ<sup>®</sup> ([www.searchiq.com/reviews](http://www.searchiq.com/reviews)) for more detailed nuts-and-bolts comparison.

Many people tend to use one favorite search engine based on what they feel is an essential feature for them - whether it is database size, currency or ease of use. Here are some questions to ask yourself and some recommended engines for your type.

| Top Five General Directories |  |
|------------------------------|--|
|                              | URL-Web Address  |
| Yahoo <sup>®</sup>           | <a href="http://www.yahoo.com">www.yahoo.com</a>           |
| Open Directory <sup>®</sup>  | <a href="http://www.dmoz.org">www.dmoz.org</a>             |
| LookSmart <sup>®</sup>       | <a href="http://www.looksmart.com">www.looksmart.com</a>   |
| Snap <sup>®</sup>            | <a href="http://www.snap.com">www.snap.com</a>             |
| Britannica <sup>®</sup>      | <a href="http://www.britannica.com">www.britannica.com</a> |

## Does Size Matter to You?

Fast Search<sup>®</sup> is a leader in both the number of pages indexed (at 300 million) and in growth rate. Most search engines can only boast of coverage of 100 million pages, less than 10 percent of the more than a billion pages that probably exist on the web. Size can be good if you are looking for rather rare information; after all, if a search engine hasn't indexed terms in a page, it can't find that page for you. But if size is really important to you, you may want to try a meta search engine like Ixquick<sup>®</sup> and sift through multiple search engine results for the best coverage. The problem with Fast Search<sup>®</sup> is that it will return results that aren't relevant, so you may have to sift through the results more or build good search queries.

## Want To Exert Power During a Search?

Many users never try any search query box except the first one provided. For users who want more power, try Advanced Altavista<sup>®</sup> ([www.altavista.com](http://www.altavista.com), then select Advanced Search<sup>®</sup>). Why is power searching an important feature? Imagine searching for chemical information and receiving hundreds of results, many of which are out-of-date and irrelevant. At Advanced Altavista<sup>®</sup> the following search immediately provided a good quality national toxicology report dated February 2000.

- "2-butoxyethanol" AND NOT acetate AND NOT url:.com
- English Language
- From 31/12/99 to 29/02/00

Altavista<sup>®</sup> is at its best when doing very specific searches like these, or for looking for images, audio and video files. The database is quite large (200 million pages), so there can be a problem with irrelevant hits.

## Easy Does It?

If you like to just type in keywords and see good results, then try Google<sup>®</sup> ([www.google.com](http://www.google.com)). It is both very easy to use and surprisingly relevant due to the way it chooses sites in its database. Sites must be referenced by a number of other websites to be included in Google<sup>®</sup>. This ranking is used in delivering results as well, so more authoritative sites seem to be included first. The limitation of this site is its basic search capabilities.

## Want To Exclude Ads and Cookies?

For those who would like to stop loading advertisements and cookies (little gifts from the Internet which keep track of where you've been), try TopClick<sup>®</sup> ([www.topclick.com](http://www.topclick.com)). This search engine promises to keep your privacy and runs no ads. As it is an offshoot of Google<sup>®</sup>, you still have few searching features to use.

## Like To Be Organized?

The NorthernLight<sup>®</sup> engine ([www.northernlight.com](http://www.northernlight.com)) not only offers a large database of 200 million pages, but offers searching of news and business sources, providing the full text of the article for a small fee. It also lists results within custom search folders that help you easily narrow your search results without time or effort on your part. If you have never tried it, you may be pleasantly surprised.

## Not Sure Where To Start?

Meta search engines will take your search query to a number

*(Continued on page 7)*

| Internet Search Engines |                                 |                                    |                 |  |
|-------------------------|---------------------------------|------------------------------------|-----------------|--|
|                         | Boolean <sup>1</sup><br>Terms   | Search<br>Features                 | IH<br>Relevancy | URL  |
| Fast Search             | + -<br>choose: all, any, phrase |                                    | B               | www.alltheweb.com                                  |
| NorthernLight           | + - AND OR NOT<br>truncation    | nesting <sup>2</sup>               | A-              | www.northernlight.com                              |
| Advanced<br>Alta Vista  | AND AND OR NOT                  | nesting<br>truncation <sup>3</sup> | B               | www.altavista.com<br>Altavista Advanced Search Tab |
| Google                  | + - AND assumed                 |                                    | B+              | www.google.com                                     |
| Excite                  | + - AND OR                      | nesting                            | C               | www.excite.com                                     |
| HotBot                  | + - AND OR                      | not nesting<br>truncation          | C+              | www.hotbot.com                                     |
| Snap                    | + - AND OR                      | nesting<br>truncation              | C+              | www.snap.com                                       |

- 1. Boolean:** Terms like AND, OR, NOT, AND NOT can be used if shown in the chart; Example: IH *or* (Industrial *and* Hygiene) searches for all sites on IH or Industrial Hygiene.  
**Implied Boolean:** + means include term, - means exclude term; Example: + hygiene – personal – dental searches for all sites on hygiene, except those on personal hygiene or dental hygiene.
- 2. Nesting:** Groups terms together; Example: (electrical and magnetic) or EMF searches for all sites on both electrical and magnetic or EMF.
- 3. Truncation:** Searches for truncated words; Example: field\* searches for all words beginning with field (fields, fielding, fieldwork, etc.).

### Searching for Information on the Internet (Continued from page 6)

of other important general search engines (possibly five, eight or 12 at a time) and deliver the various search engine results together to you in one list of results. One advantage of this approach is that you don't have to remember various rules for searching different engines. While there is little searching control using this approach, it can be very rewarding at times. Many of these engines are now available, including these:

- Ixquick® (www.ixquick.com): Comprehensive and fast. Presents results by relevance to the search. Compiles duplicates together.
- RedeSearch® (www.redesearch.com): Comprehensive and fast. Returns one long list of hits, with about 10-20 results from each search engine

### Testing for IH Content

About a dozen queries were performed on several different search engines to determine whether any were particularly useful for industrial hygiene content. Some simple and some complex searches locating information on various topics such as metalworking fluids, bloodborne pathogens, analytical methods, IH ventilation courses, 2-butoxyethanol acetate and health effects and acetone and toxicity were attempted. The results based on the apparent relevance of the first 10 results returned were graded based on whether the title and description of the

result was a reasonable match for the information being sought. The actual website results were not evaluated directly. None of the search engines provided consistently excellent results. However, some did stand out as providing more relevant results than others (see chart above). Some engines did well on some of the topics, but poorly on others. One recommendation is to test engines yourself rather than relying on the presented test results. Keep trying these engines until you find one you like and understand.

### Tips for Better Searching

Using most search engines requires some patience and time to read the engine's search help section. Here are some important features available on most engines:

1. Use + in front of words you want to include, - in front of words you want to exclude (+hygiene, -dental).
2. Boolean operators such as AND, OR and AND NOT are usually okay. Sometimes they must be capitalized.
3. Phrase searching is usually performed if you use quotes ("manual of analytical methods"), but if you aren't sure, try parentheses ( ) and see if your results change.

(Continued on page 8)

*Searching for Information on the Internet (Continued from page 7)*

4. If you don't like your search results, try rephrasing your query.

5. Still not sure about the search? Try a meta search engine and see where you find good results.

This article was adapted from *The Synergist*, April 2000 and used with permission.

## Public Employees Concerned about Possible Health Hazards from Pigeon Droppings

By Thom Olszak

"The town where I live is home to millions of pigeons and we have heard tales of people getting sick from 'bird fever.' I'm a teacher and I work in a very old school. I have seen two very large piles of pigeon droppings in the school attic. I am concerned because I work on the floor directly below the attic; the ceiling of my classroom has cracks in it. Also, the school has recently been working on a new electrical system. Am I in danger of catching bird fever?"

This scenario is a reflection of real questions and concerns. Pigeons are everywhere it seems, and there are a lot of them! The most serious health risks arise from disease organisms that grow in the nutrient-rich accumulations of droppings and debris under a roost — particularly if roosts have been active for years. The potential for exposure to disease causing organisms does exist when years of accumulated pigeon droppings are disturbed.

The PEOSH Program has evaluated several work sites where employees have expressed concern about the potential hazards of exposure or had experienced health symptoms that may have been related to pigeon-dropping-removal operations.

The common denominator in these PEOSH investigations has been the presence of roosting pigeons in an undisturbed location.

### *City Hall*

In one case, the local newspapers reported that a city hall building was "taken over" by pigeons that had deposited several inches of manure on the window ledges.

### *Bridge Commission*

At a bridge commission, employees complained to the PEOSH Program that their booths were covered in pigeon droppings.

### *University Campus*

In another situation, the maintenance engineers at a university

campus were concerned about bird droppings near a ventilation system located on the roof of one of the buildings.

### *School Attic*

Communication of information concerning potential health hazards is essential. For instance, the removal of years of accumulated pigeon droppings from a school attic resulted in an investigation in conjunction with an occupational physician from the University of Medicine and Dentistry of New Jersey, Environmental and Occupational Safety and Health Institute (EOSHI). This investigation consisted of several site visits, employee interviews by both the physician and the PEOSH inspectors and a meeting with teachers and employees to explain the findings and conclusions. The removal was conducted in accordance with recommended work practices to minimize or eliminate exposure for both employees doing the work and those working nearby. However, a lack of communication between the employer and employees resulted in the perception of the existence of a greater risk than actually existed.

### *19<sup>th</sup> Century Building*

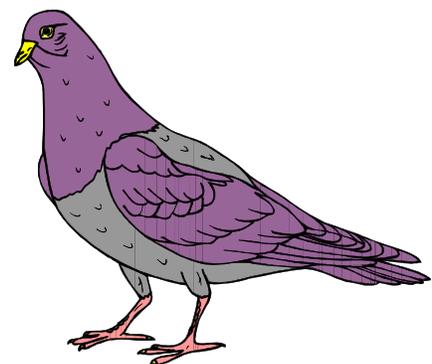
The upper level of a 19<sup>th</sup> century building was no longer used and was sealed off and inaccessible. There were no work activities or people traveling through the area to disturb the accumulated droppings. In this case, there was no potential exposure and since the area was isolated and not used, removal was not necessary and the expense of a costly and extensive removal could be safely avoided.

These and other examples demonstrate the need for an information bulletin on the health hazards associated with bird droppings and methods of controlling exposures during removal.

The PEOSH Program has published an information bulletin on the health hazards associated with bird and bat droppings. The bulletin addresses:

- Disease Association
- Hazard Recognition
- Hazard Evaluation
- Hazard Control
- Recommendations
- References for further information.

For a copy of the bulletin, call the PEOSH Program at (609) 984-1863 or visit our web site at [www.state.nj.us/health/eoh/peoshweb](http://www.state.nj.us/health/eoh/peoshweb).

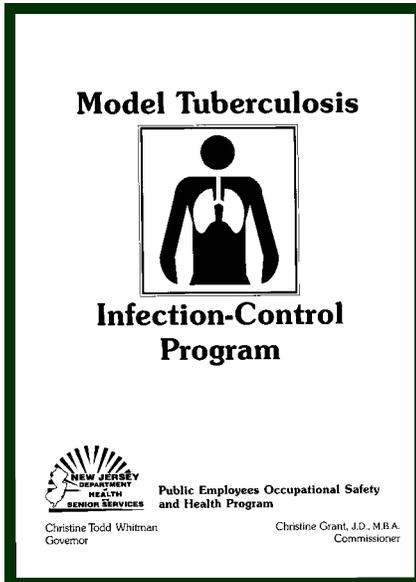


## Tuberculosis Infection Control Program

By David Loughlin

The New Jersey Department of Health and Senior Services (NJDHSS), Occupational Health Service (OHS), Public Employees Occupational Safety and Health Program (PEOSH), was one of five grantees awarded funds from the National Institute for Occupational Safety and Health (NIOSH) under the Cooperative Agreement for the “Control

of Tuberculosis and Tuberculous Infection in Health-Care Workers.” The purpose of this Cooperative Agreement was to develop methods which will aid public health-care facilities with the implementation of the Centers for Disease Control and Prevention (CDC) “Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care



Facilities, 1994”<sup>1</sup>. The PEOSH Program continues to work with public and private hospitals, health-care clinics, correctional facilities, and other health-care facilities to develop the methods.

Some of the accomplishments of the grant were:

- Developed and executed Memorandum of Understanding with the University of Medicine and Dentistry of New Jersey, Bergen Pines County Hospital and Runnells Specialized Hospital.
- Conducted comprehensive surveys to assess the use of administrative controls (risk assessments, infection control, and surveillance), ventilation, ultraviolet germicidal irradiation (UVGI), and respiratory protection at all three hospitals.
- Monitored the development of the “Tuberculosis Awareness Trainer’s Guide and Training Curriculum for Health-Care Workers” by the Environmental and Occupational Health Science Institute (EOSHI). Based on information obtained from a needs assessment, EOSHI developed “General Audience”, Emergency Medical Services Workers,” and “Nursing” modules.
- Completed four “TB Awareness” Train-the-Trainer Programs through a Memorandum of Understanding with EOSHI. The program was presented to emergency

medical service, hospital, and clinic personnel.

- Conducted comprehensive surveys of administrative controls (risk assessments, infection control, and surveillance), ventilation, ultraviolet germicidal irradiation (UVGI), and respiratory protection at 35 tuberculosis clinics. A summary of the report was sent to the Centers for Disease Control and Prevention. A reassessment of 27 clinics having deficiencies was also conducted.
- Revised the Public Employees Occupational Safety and Health (PEOSH) Program’s “Requirements for Preventing Occupational Exposure to Tuberculosis” (TB Requirements) to reflect the federal Occupational Safety and Health Administration’s (OSHA) “Directive on Enforcement Procedures and Scheduling for Occupational Exposure to Tuberculosis,” and the Centers for Disease Control and Prevention’s (CDC) “Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Facilities, 1994.”
- Developed a “Model Tuberculosis Infection Control Program.” The program was sent to all municipalities, health officers, county and state correctional facilities, and tuberculosis clinics in New Jersey.
- Participated in more than 20 presentations to workers, health-care providers, and public health professionals.

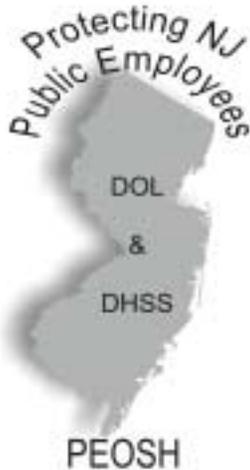
<sup>1</sup>Centers for Disease Control and Prevention. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care facilities, 1994. MMWR 1994;43(No. RR-13):I-132.

### The NJ PEOSH Act states that:

“Every employer shall:

- Provide each of his employees with employment and a place of employment which are free from recognized hazards which may cause serious injury, physical harm or death to his employees; and
- Comply with occupational safety and health standards promulgated under this act.”

N.J.S.A. 34:6A-33



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#### **For Health Issues:**

The New Jersey Department of Health and Senior Services investigates complaints regarding *health* hazards in the workplace.

**To obtain more information call:  
 (609) 984-1863**

#### **For Safety Issues:**

The New Jersey Department of Labor (DOL) investigates complaints regarding *safety* hazards in the workplace. In addition, DOL is responsible for administering and enforcing the New Jersey PEOSH Act throughout the state.

**To obtain more information call:  
 (609) 292-7036**

*This document was prepared by the NJDHSS  
 PEOSH Program*